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BULLETIN 1147B

PARTS

MOTORS, GOVERNORS
AND ACCESSORIES

(For Model 28 line motors, see
associated apparatus bulletin)

TELETYPE®
CORPORATION
SUBSIDIARY OF *Western Electric Company* INC.
CHICAGO, ILLINOIS, U.S.A.

LIST OF EFFECTIVE PAGES

June, 1960

(Supersedes October, 1952 Issue)

Page Number	Change In Effect
A to B	Change 1
1-1 to 1-6	Change 1
2-1 to 2-10	Change 1
3-1 to 3-7	Change 1
4-1 to 4-6	Change 1

The above list indicates the effective pages as of the date of issue. Upon receipt of Change Pages, insert them numerically and discard any superseded pages.

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This bulletin supersedes Correction Sheets 480EE, 506EE and 650EE, and supplements the following bulletins:

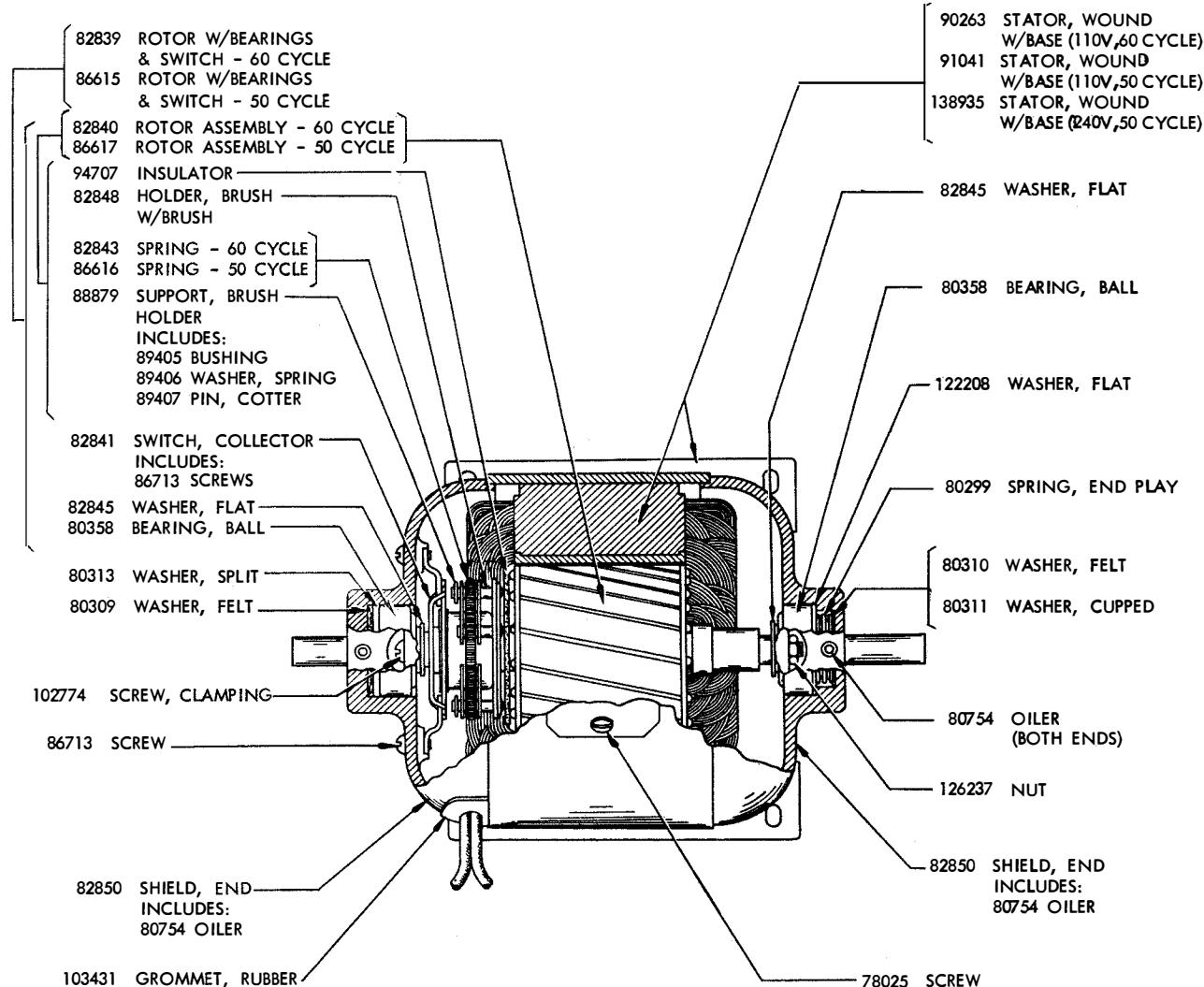
1028B	1041B	1079B	1087B	1103B	1109B	1120B	1130B	1141B
1030B	1051B	1080B	1088B	1104B	1110B	1122B	1131B	1143B
1031B	1063B	1082B	1095B	1106B	1116B	1123B	1132B	1145B
1036B	1064B	1083B	1096B	1107B	1117B	1125B	1137B	1148B
1037B	1072B	1084B	1100B	1108B	1119B	1126B	1140B	

Bell System Only

When ordering parts from this bulletin, prefix each number with the letters TP.

1147B

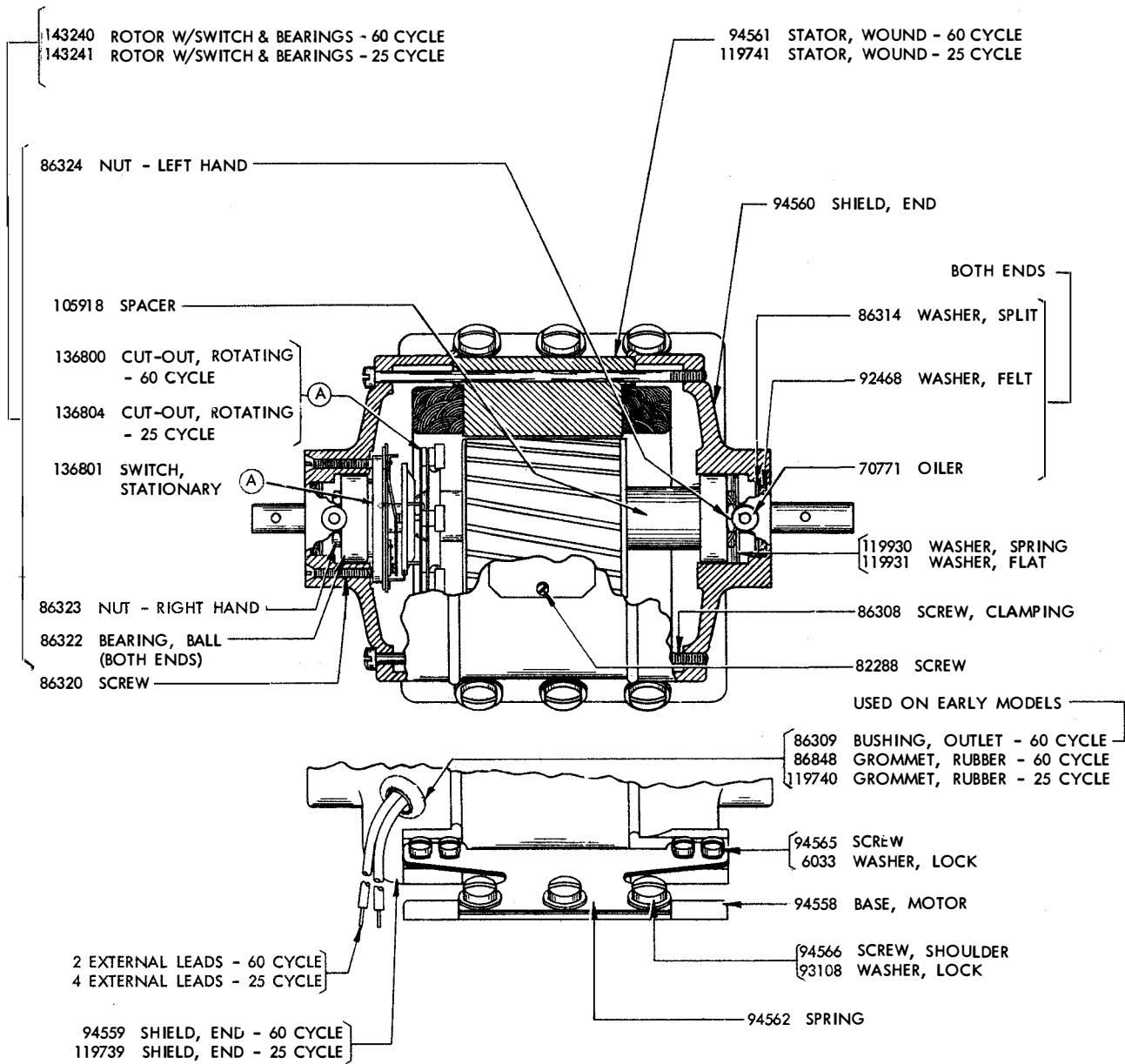
SECTION 1
STANDARD MOTORS



82283 SYNCHRONOUS MOTOR: 1/40 H.P., 110 V., 60 CYCLE, A.C. (G.E. Model 5SH25AB11B)
 (NEW STYLE - SEE PAGE 3-3 FOR OLD STYLE)

82714 SYNCHRONOUS MOTOR: 1/40 H.P., 110 V., 50 CYCLE, A.C. (G.E. Model 5SH25AB14B)

138809 SYNCHRONOUS MOTOR: 1/40 H.P., 240 V., 50 CYCLE, A.C. (G.E. Model 5SH25AB47)

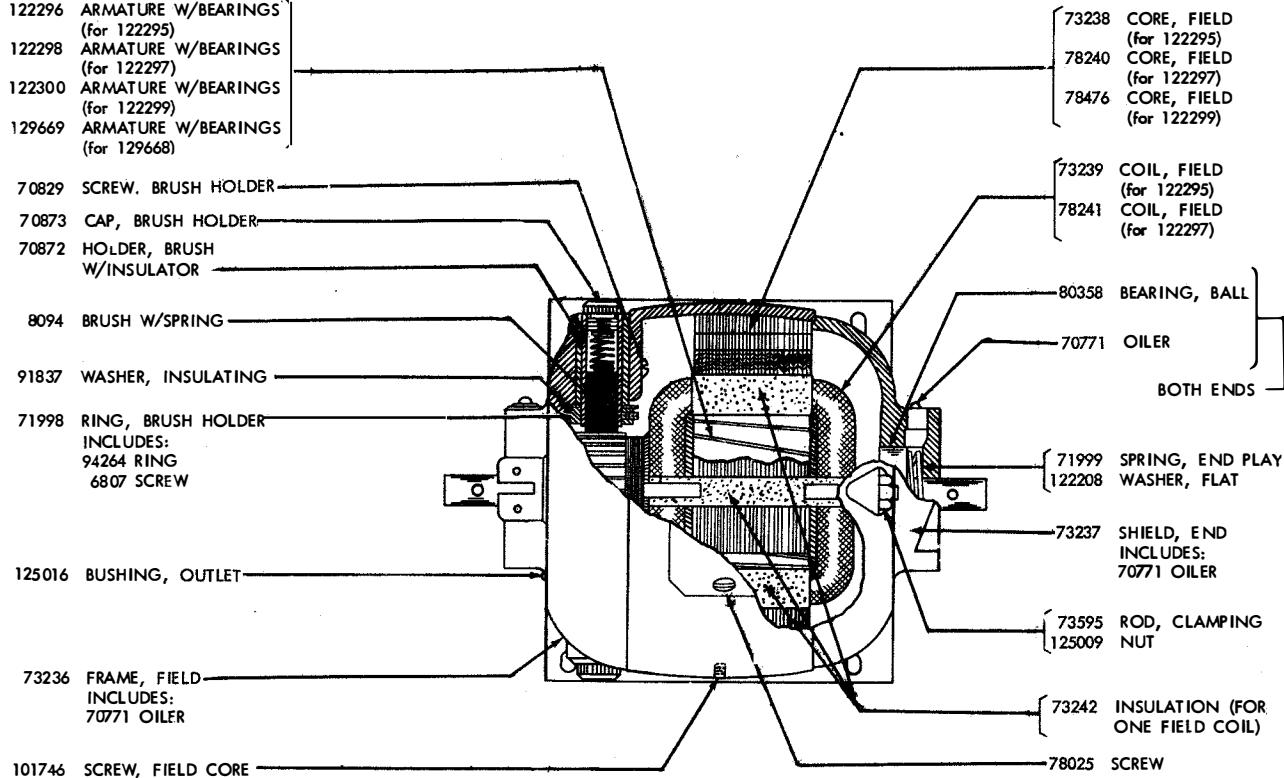


92575 SYNCHRONOUS MOTOR: 1/40 H.P., 115 V., 60 CYCLE, A.C. (H.C. Model S-9017)

114321 SYNCHRONOUS MOTOR: 1/40 H.P., 115 V., 25 CYCLE, A.C. (H.C. Model S-9060)

(WITH NEW STYLE CUT-OUT SWITCHES-SEE PAGE 3-7 FOR OLD STYLE)

(A) For explanation, see page 4-2.

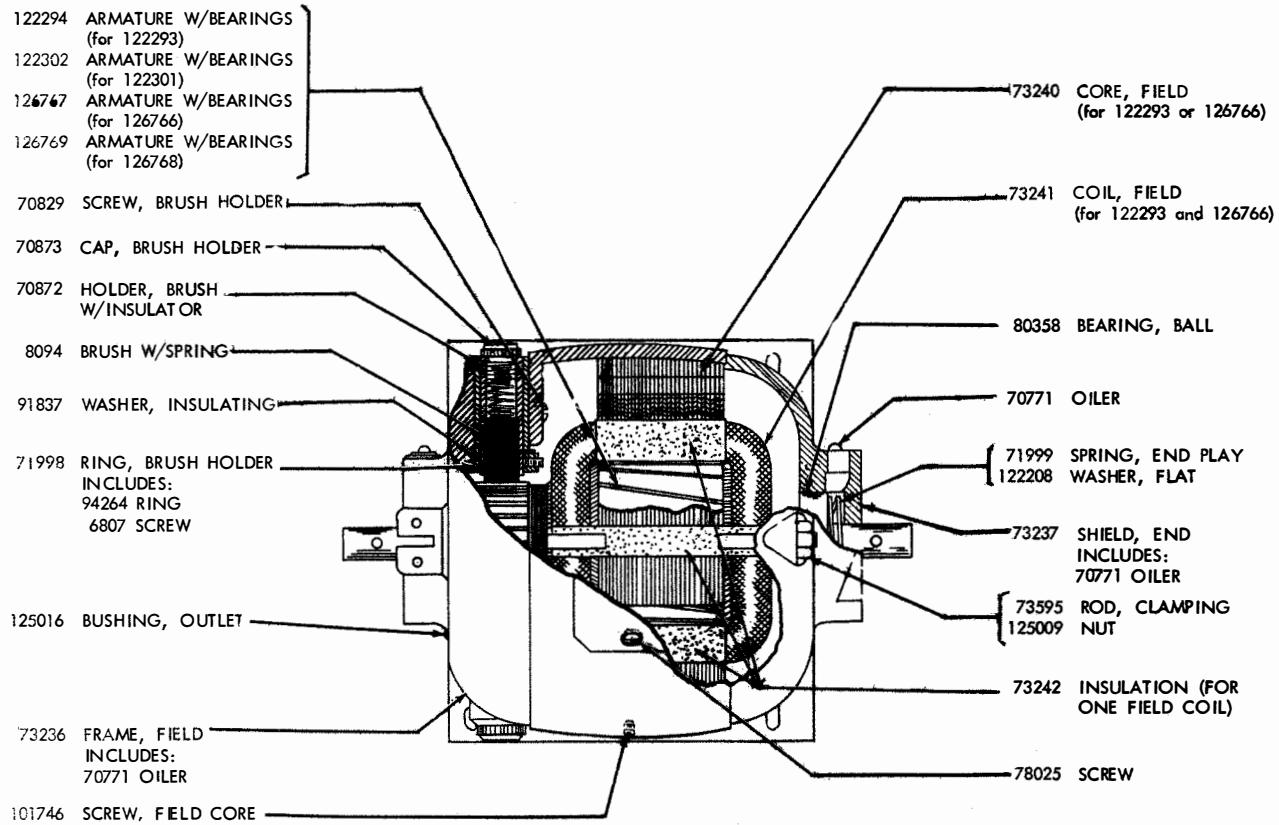


122295 SERIES MOTOR: 1/25 H.P., 110 V., 50/60 CYCLE A.C. (G.E. Model 5BA65AA77A or 5BA65AA179)

122297 SERIES MOTOR: 1/25 H.P., 95/130V., 50/60 CYCLE A.C. (G.E. Model 5BA65AA29A or 5BA65AA178)

122299 SERIES MOTOR: 1/25 H.P., 220 V., 60 CYCLE A.C. (G.E. Model 5BA65AA116A)

129668 SERIES MOTOR: 1/25 H.P., 110 V., 50 CYCLE A.C. (G.E. Model 5BA65AA142A)

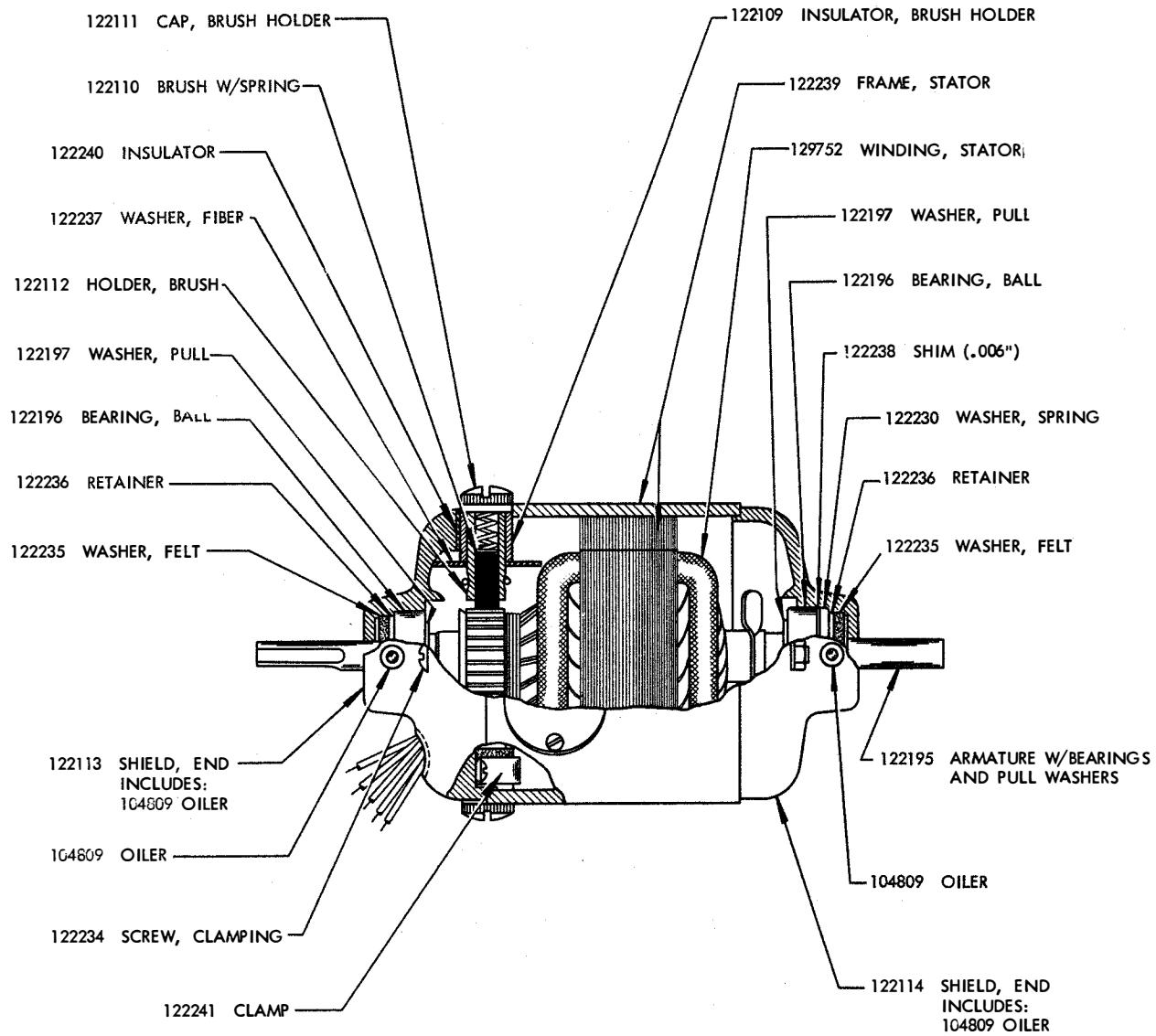


122293 SHUNT MOTOR: 1/17 H.P., 110 V., D.C. (G.E. Model 5BY30A3A or 5BY30A11)

122301 SHUNT MOTOR: 1/17 H.P., 220 V., D.C. (G.E. Model 5BY30A10A)

126766 SHUNT MOTOR: 1/20 H.P., 110 V., D.C. (G.E. Model 5BY30A6A)

126768 SHUNT MOTOR: 1/20 H.P., 220 V., D.C. (G.E. Model 5BY30A7A)

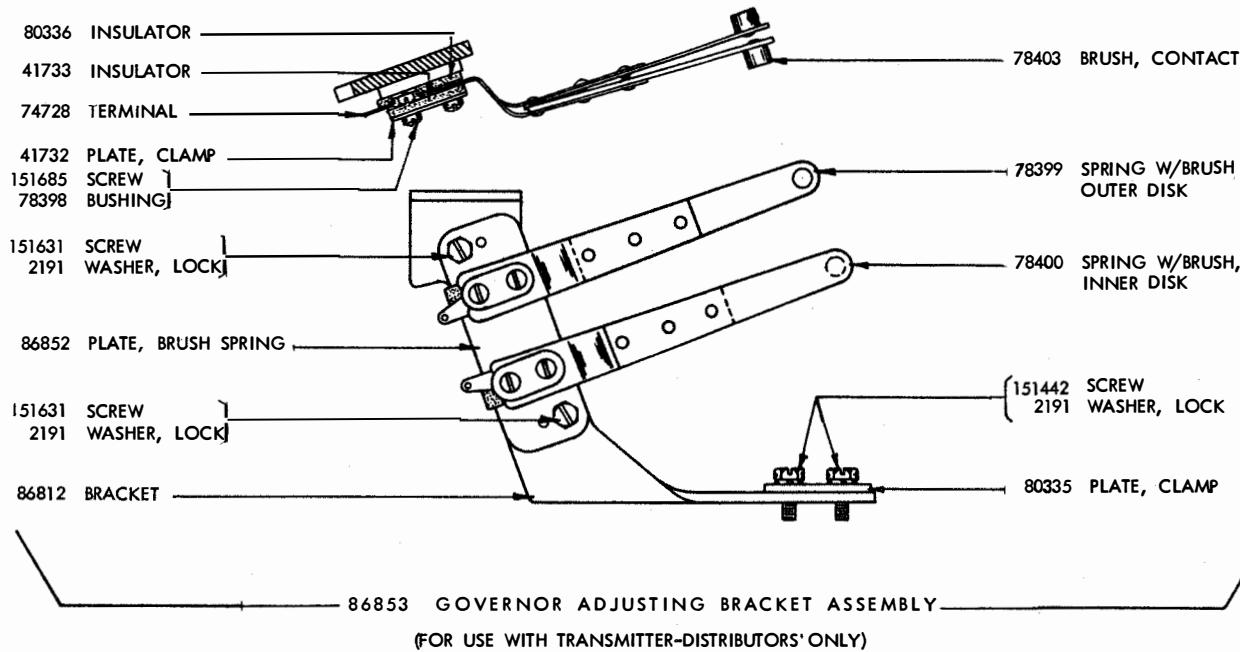
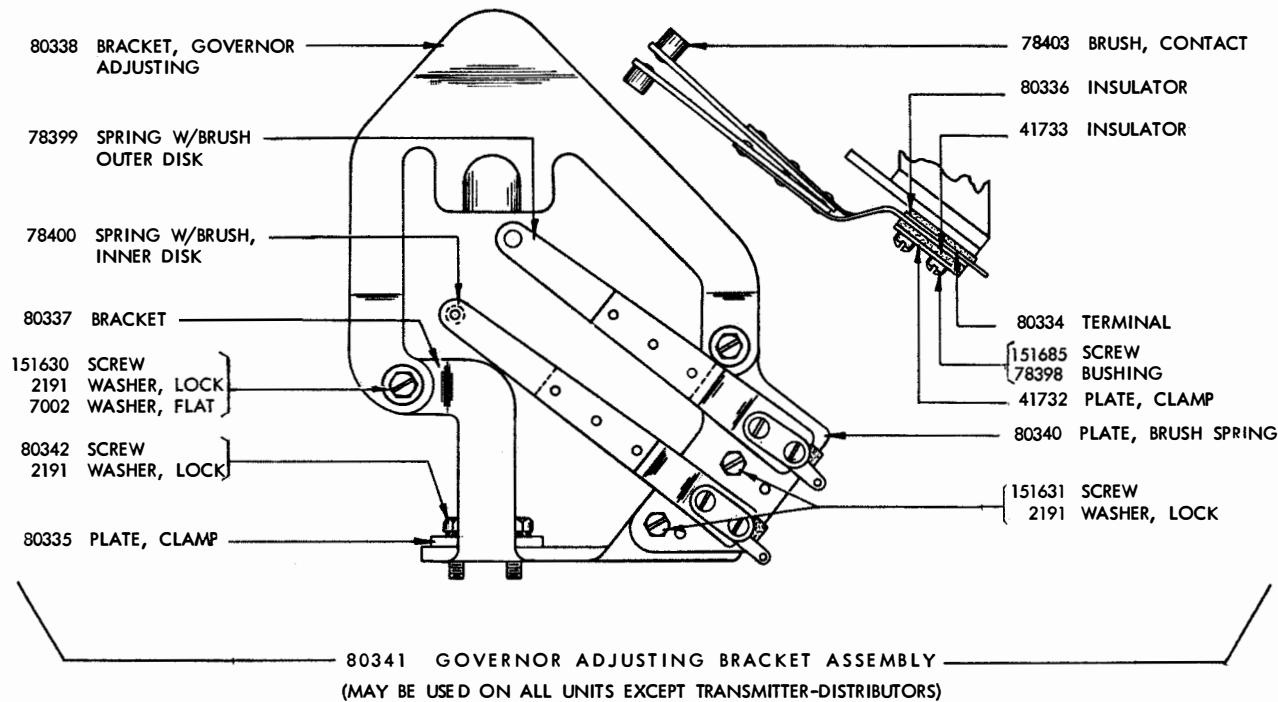


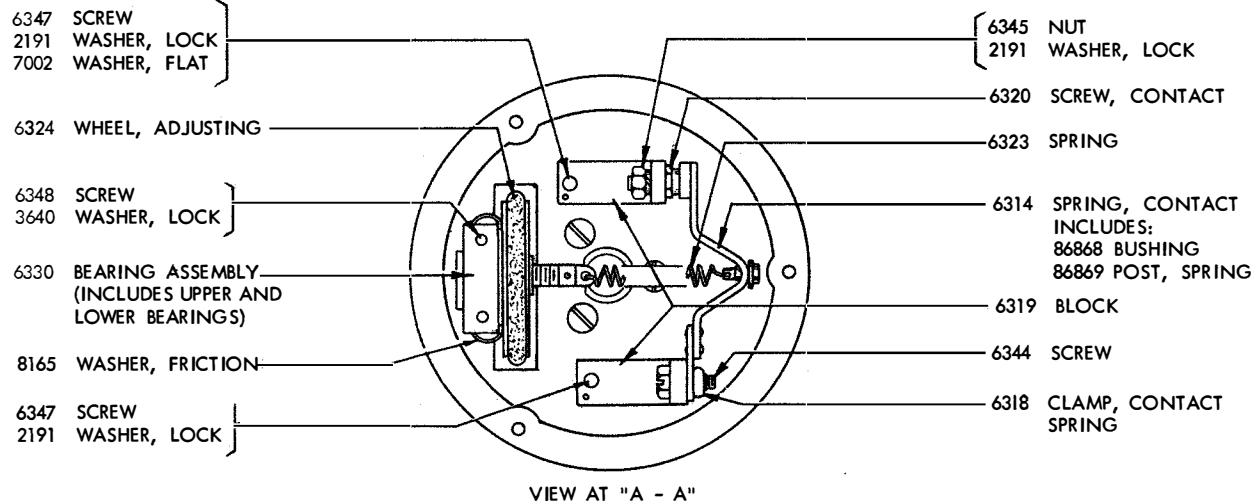
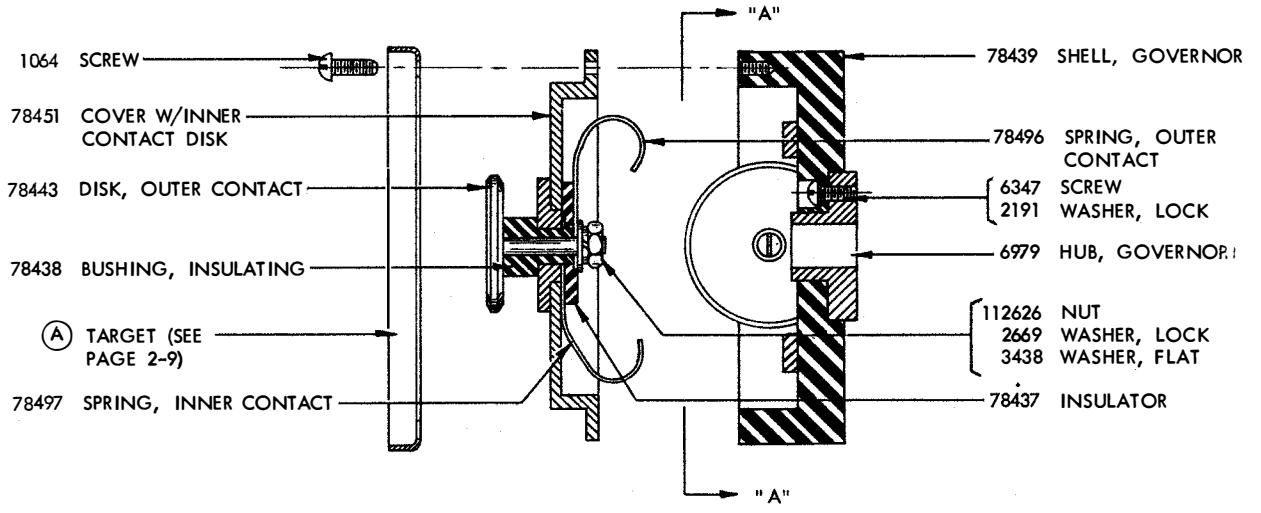
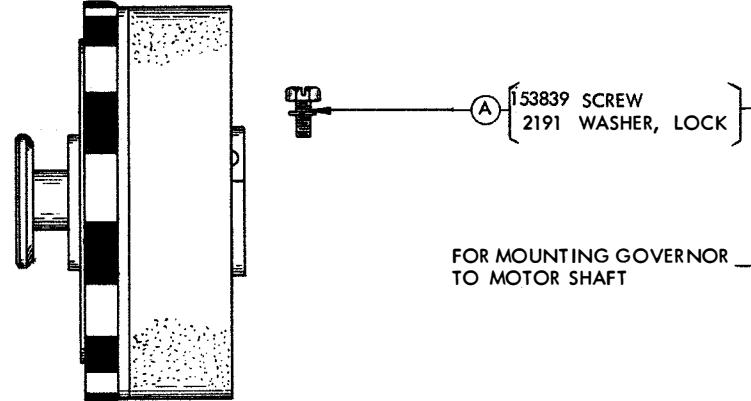
121272 SERIES MOTOR: 1/30 H.P., 115 V., A.C./D.C. (G.E. Model 5P36DA33)

1147B

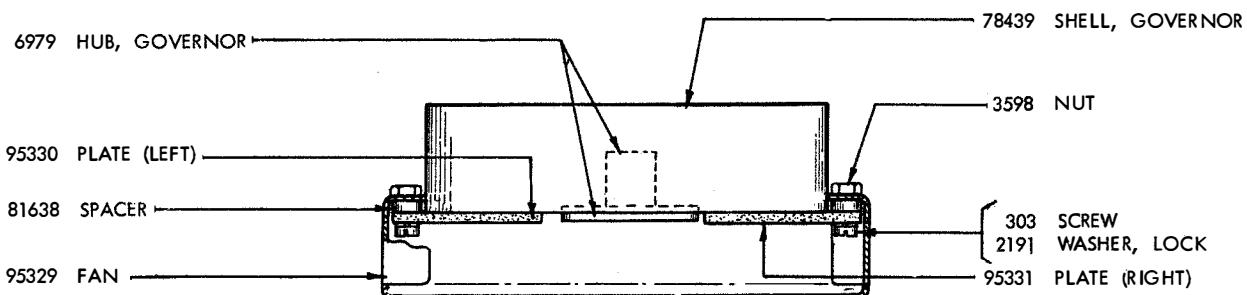
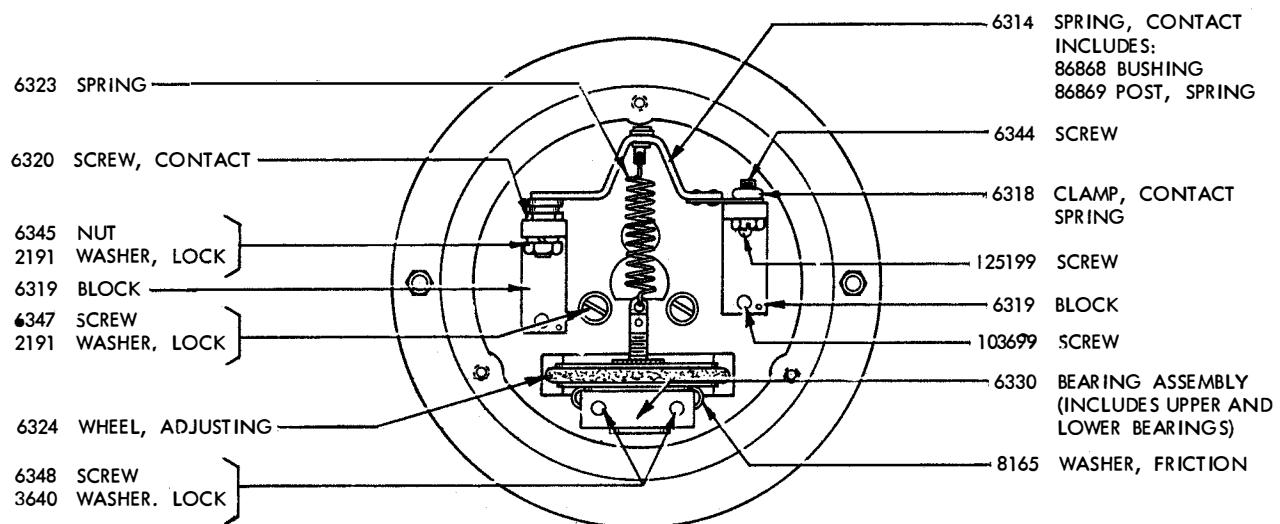
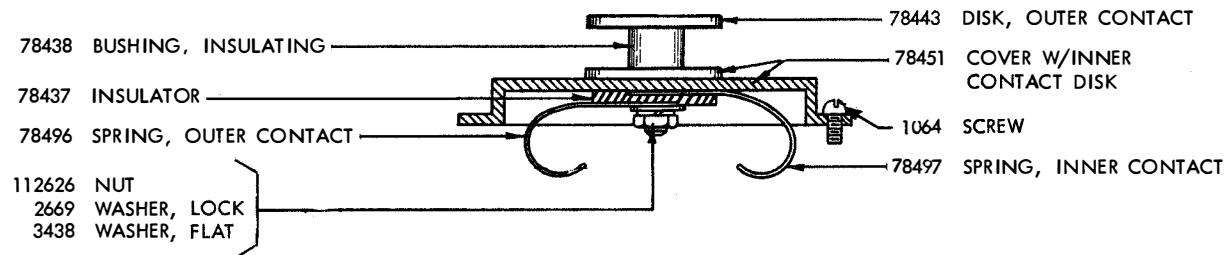
SECTION 2

GOVERNORS AND ACCESSORIES

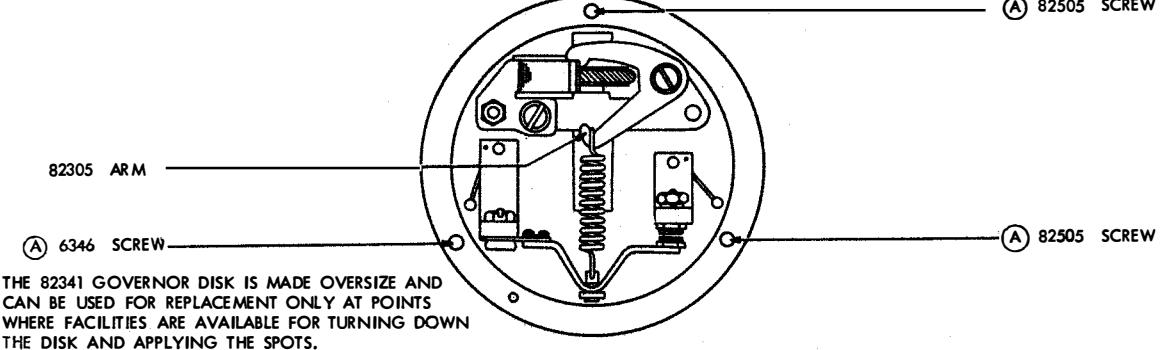
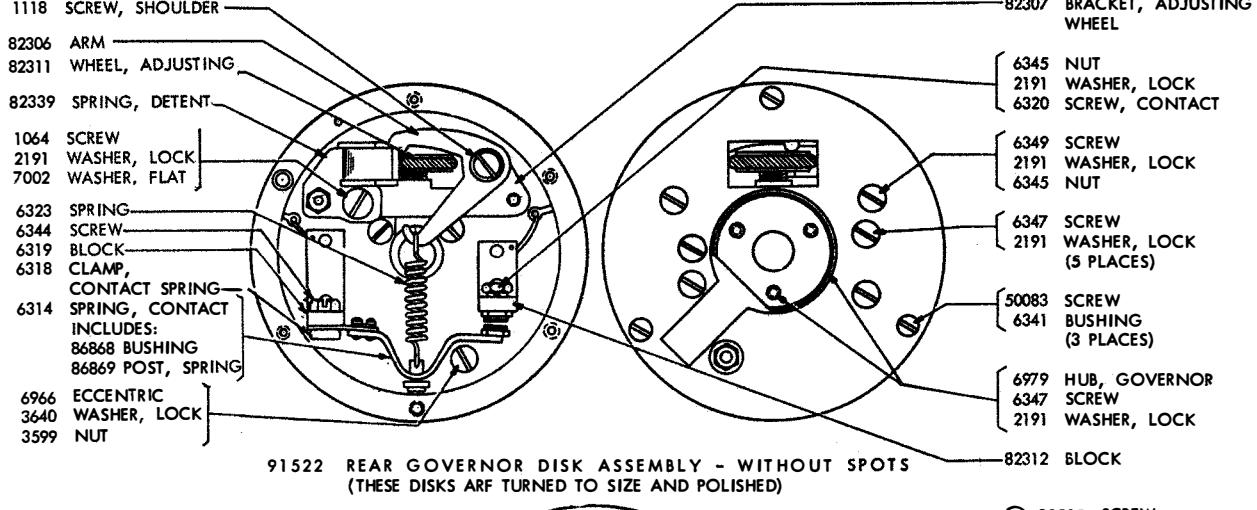




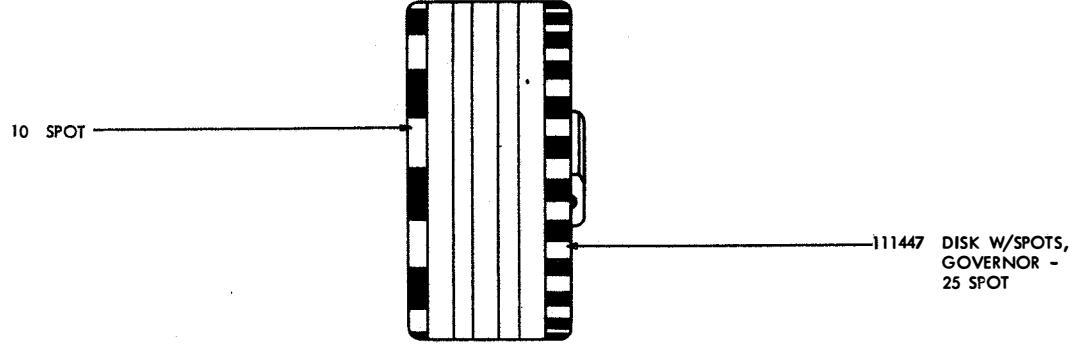
80352 CENTER CONTACT GOVERNOR ASSEMBLY
(EXCLUDES PARTS MARKED A)



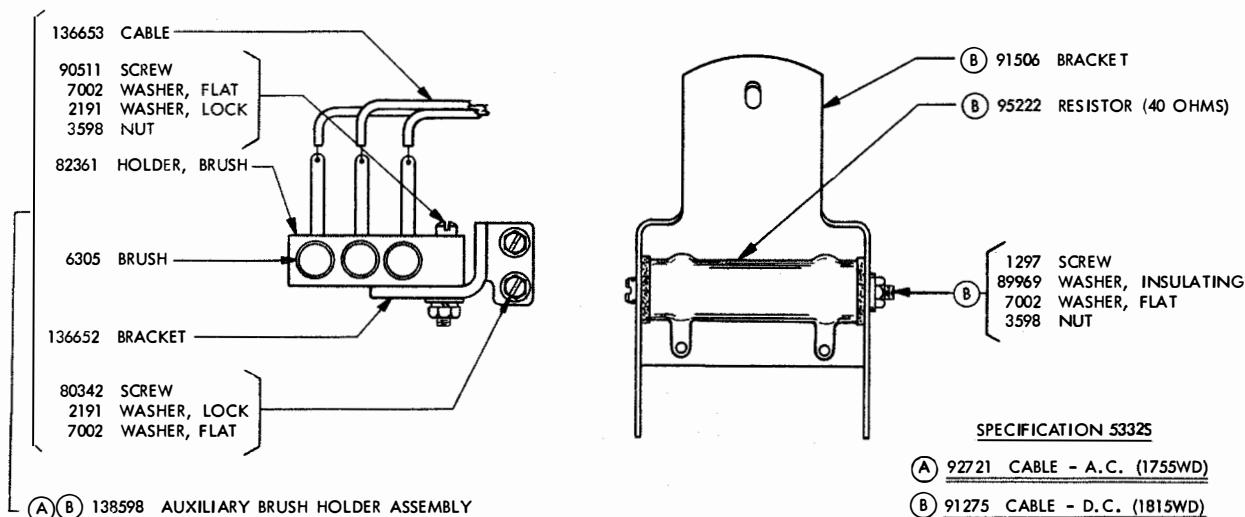
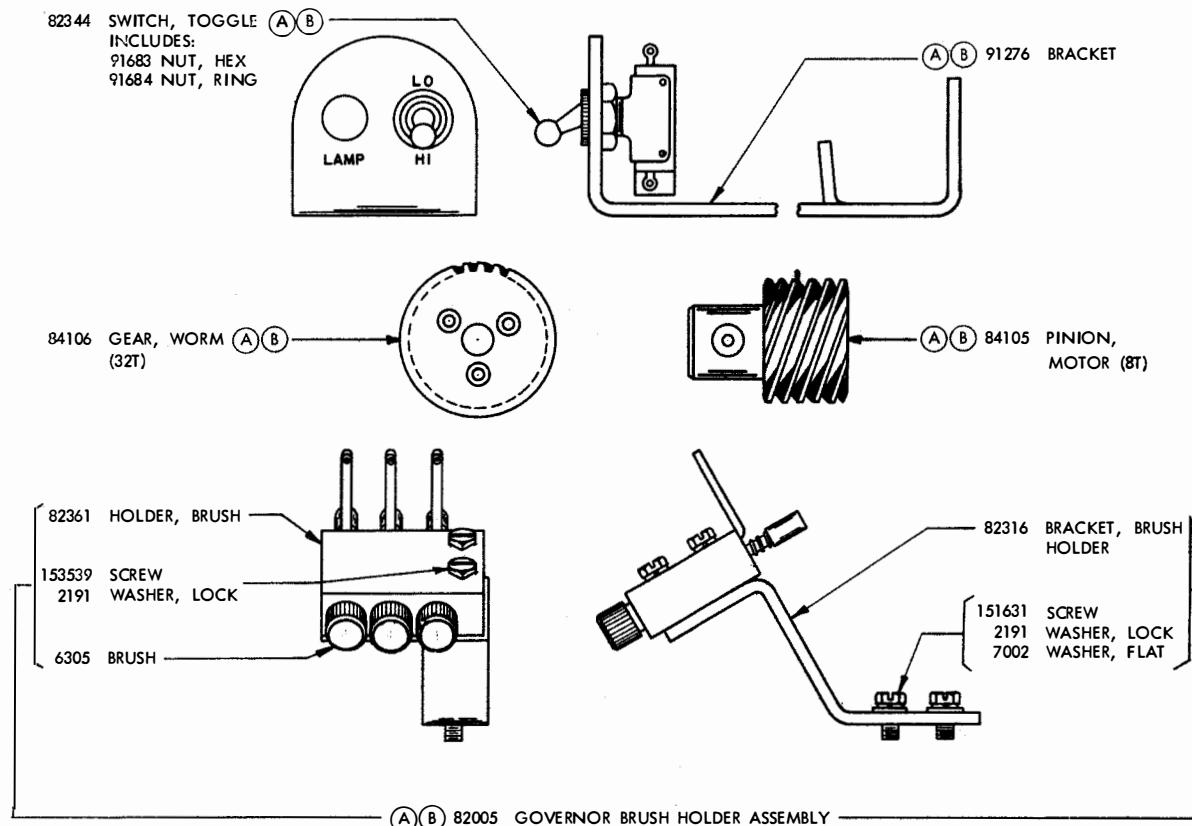
95332 CENTER CONTACT GOVERNOR ASSEMBLY WITH FAN



82341 FRONT GOVERNOR DISK ASSEMBLY
(EXCLUDES PARTS MARKED (A) - PARTS SHOWN BUT NOT LISTED, SAME AS ABOVE)



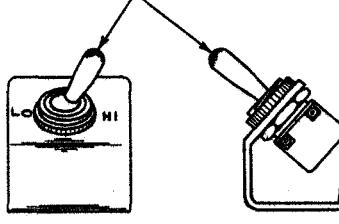
103311 TWO-SPEED GOVERNOR ASSEMBLY - WITH SPOTS
(INCLUDES ALL PARTS LISTED ABOVE)



103543 MODIFICATION KIT TO EQUIP A MODEL 15 PRINTER A.C. GOVERNED
MOTOR WITH A TWO-SPEED GOVERNOR FOR 368 AND 460 O.P.M.
(INCLUDES ALL PARTS MARKED (A) ON THIS PAGE AND THE 103311 GOVERNOR ASSEMBLY SHOWN ON PAGE 2-5)

103544 MODIFICATION KIT TO EQUIP A MODEL 15 PRINTER D.C. GOVERNED
MOTOR WITH A TWO-SPEED GOVERNOR FOR 368 AND 460 O.P.M.
(INCLUDES ALL PARTS MARKED (B) ON THIS PAGE AND THE 103311 GOVERNOR ASSEMBLY SHOWN ON PAGE 2-5)

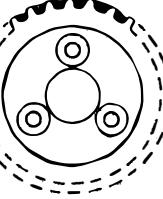
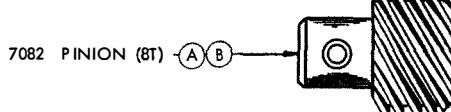
98899 SWITCH, TOGGLE
INCLUDES:
91683 NUT, HEX
91684 NUT, RING



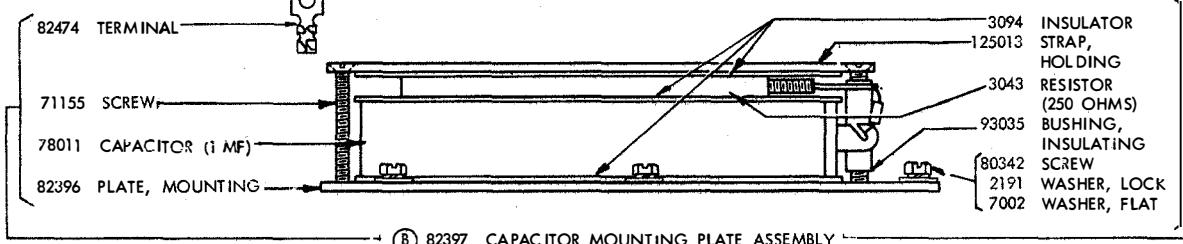
102788 BRACKET

74986 SCREW
2191 WASHER, LOCK
7002 WASHER, FLAT

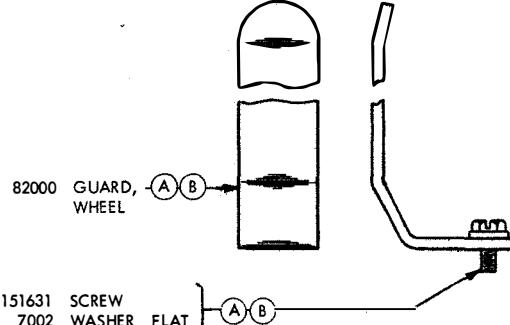
(A) 103435 GOVERNOR SWITCH ASSEMBLY



6991 GEAR (32T)



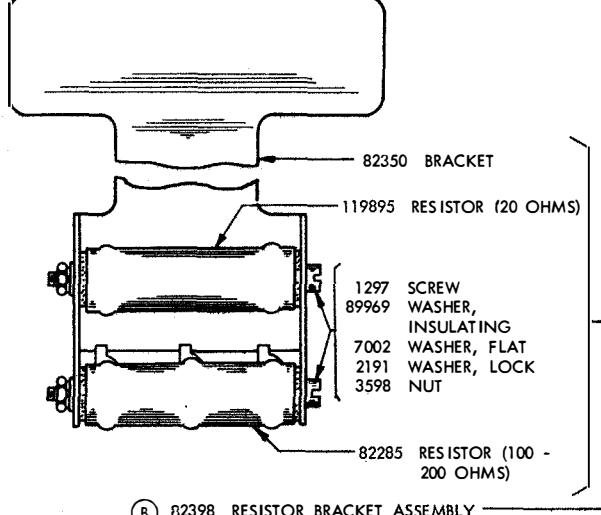
(B) 82397 CAPACITOR MOUNTING PLATE ASSEMBLY



151631 SCREW
7002 WASHER, FLAT

(A) 98846 CABLE - A.C. (2080WD)
(B) 103315 CABLE - D.C. (2080WD)

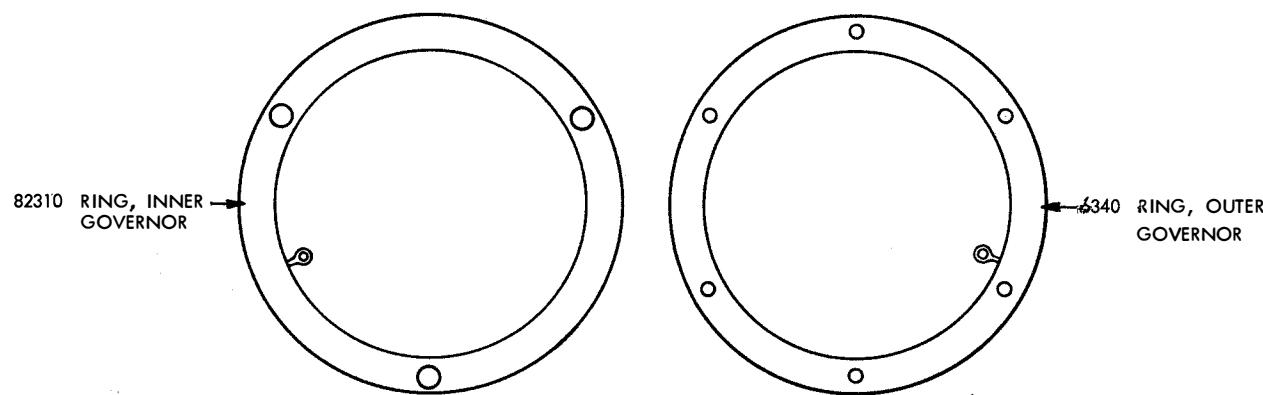
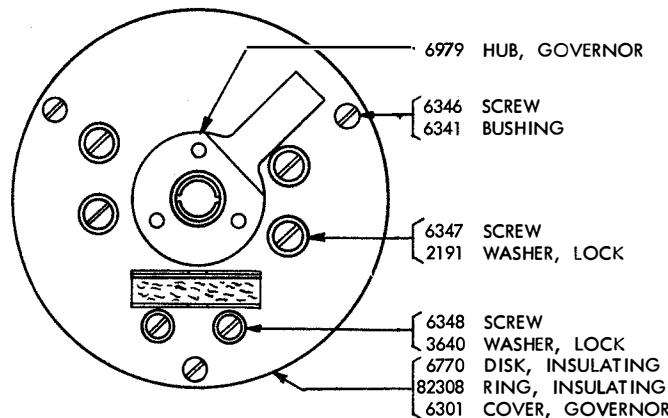
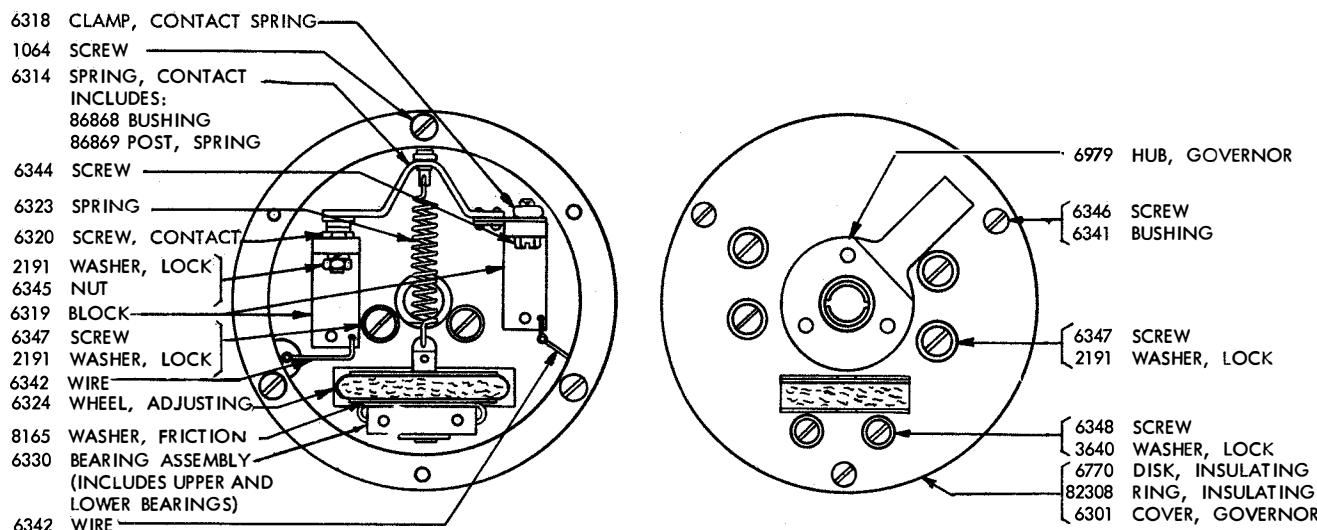
SPECIFICATION 53125



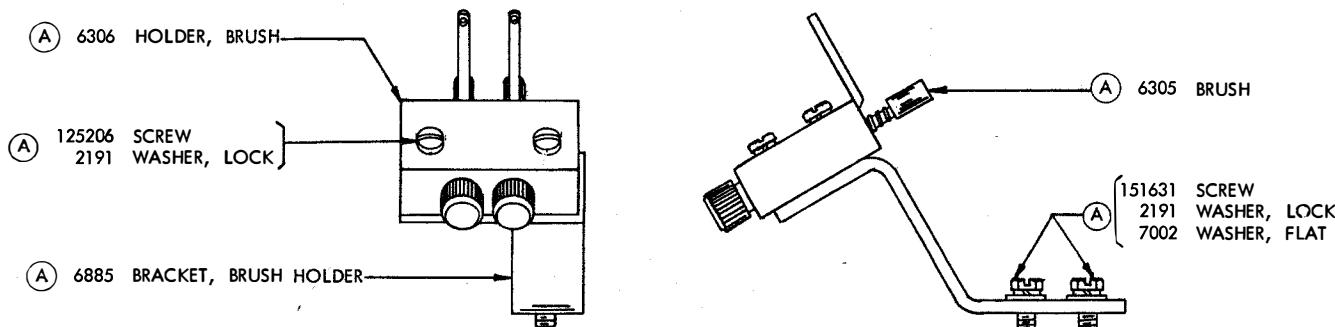
(B) 82398 RESISTOR BRACKET ASSEMBLY

103312 MODIFICATION KIT TO EQUIP A MODEL 14 PRINTER A.C. GOVERNED MOTOR
WITH A TWO-SPEED GOVERNOR FOR 368 AND 460 O.P.M.
(INCLUDES ALL PARTS MARKED (A), THE 103311 GOVERNOR ASSEMBLY - PAGE 2-5, THE
82005 AND THE 138598 GOVERNOR BRUSH HOLDER ASSEMBLIES - PAGE 2-6)

103313 MODIFICATION KIT TO EQUIP A MODEL 14 PRINTER D.C. GOVERNED MOTOR
WITH A TWO-SPEED GOVERNOR FOR 368 AND 460 O.P.M.
(INCLUDES ALL PARTS MARKED (B), THE 103311 GOVERNOR ASSEMBLY - PAGE 2-5, THE
82005 AND THE 138598 GOVERNOR BRUSH HOLDER ASSEMBLIES - PAGE 2-6)

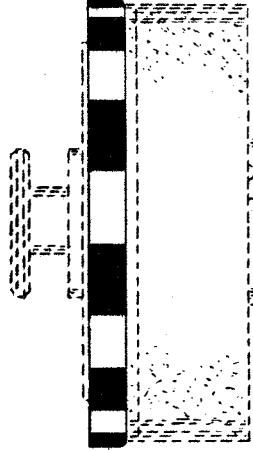


THESE GOVERNOR RINGS ARE MADE OVERSIZED AND CAN BE USED FOR
REPLACEMENT ONLY AT POINTS WHERE FACILITIES ARE AVAILABLE FOR
TURNING THEM DOWN AFTER RINGS HAVE BEEN ASSEMBLED IN GOVERNOR.



7485 PERIPHERAL CONTACT TYPE GOVERNOR

(EXCLUDES PARTS MARKED (A))

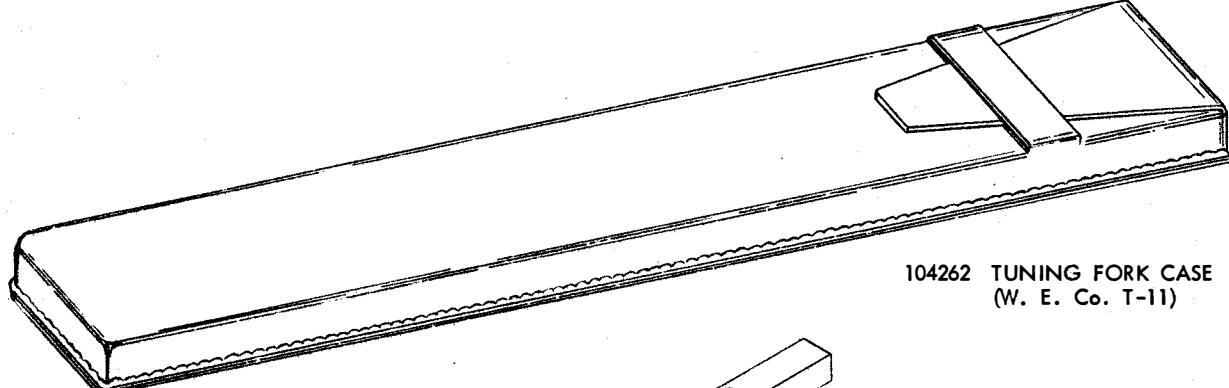
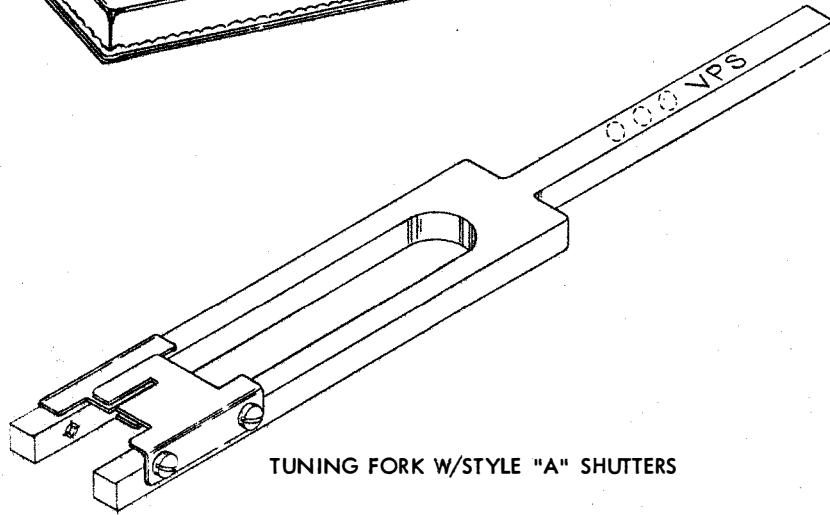


TARGETS

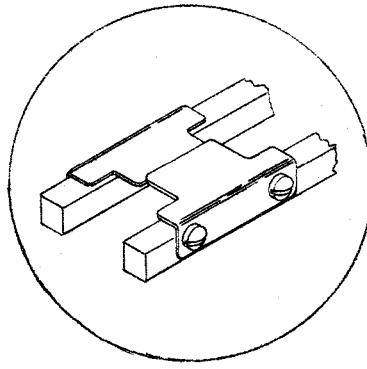
NO OF SPOTS	PART NUMBER	BELL CODE
5	73376	
6	73377	
7	8425	
8	7704	
9	7705	
10	7105	1G
11	7106	1H
13	7107	1B
23	72665	1J
35	93903	

2102 2000

1600 RPM

104262 TUNING FORK CASE
(W. E. Co. T-11)

TUNING FORK W/STYLE "A" SHUTTERS



STYLE "B" SHUTTERS

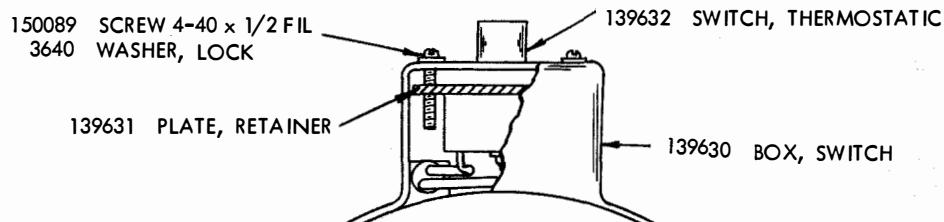
TUNING FORKS

VIBRATIONS PER SECOND (VPS)	PART NUMBER	SHUTTER STYLE	OVERALL LENGTH	VIBRATIONS PER SECOND (VPS)	PART NUMBER	SHUTTER STYLE	OVERALL LENGTH
87.6	*103628	A	11.063	123.5	104988	B	9.813
90.46	104983	A	10.843	124.5	104987	A	9.781
96.19	104984	A	10.690	125	114755	A	9.682
100	104985	A	10.533	126.4	114759	A	9.651
102	114756	A	10.453	127.3	104981	A	9.625
116	114758	A	10.000	128	104982	A	9.600
120	104986	A	9.875	139.29	114757	A	9.281
121.7	104980	A	9.813	168	104748	B	8.843
122.7	114754	A	9.813				

*Bell System Standard

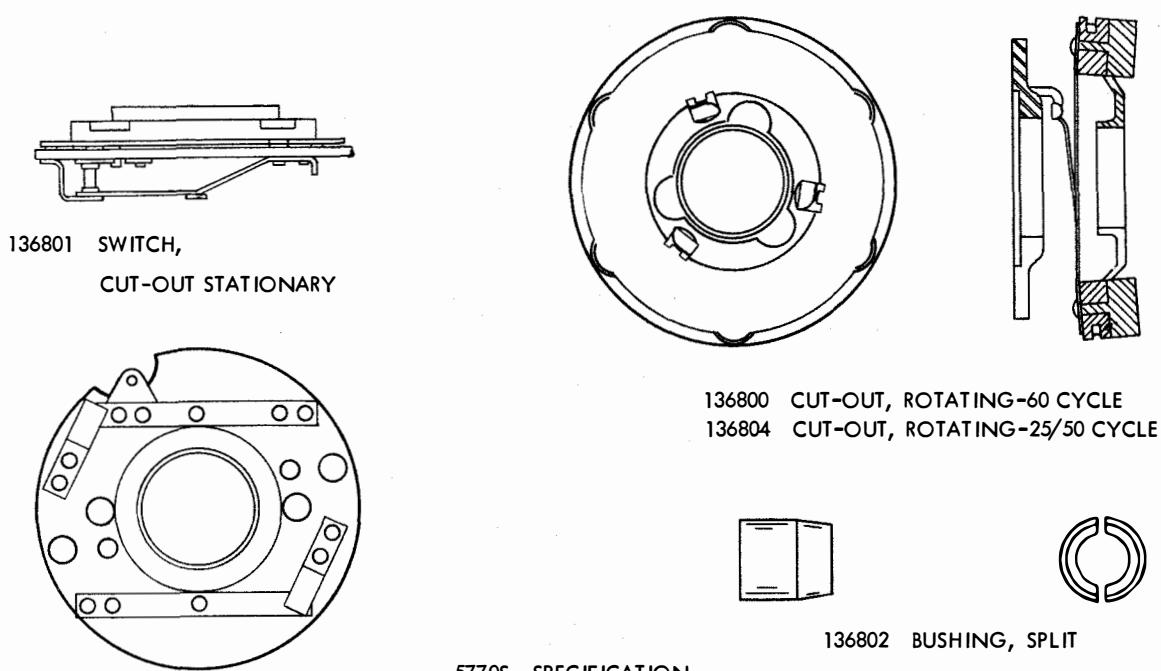
TARGETS AND TUNING FORKS

1147B



AT BACK OF THIS BUL. 5904S SPECIFICATION

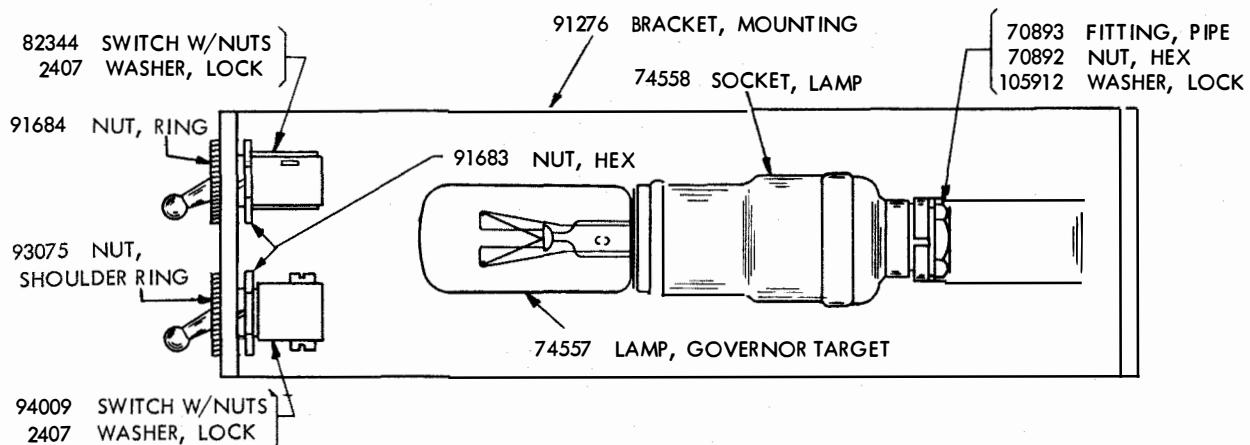
136132 MODIFICATION KIT TO EQUIP THE 82283 SYNCHRONOUS MOTOR WITH OVERLOAD PROTECTION



5770S SPECIFICATION

136035 MODIFICATION KIT TO PROVIDE AN IMPROVED STARTING WINDING CUT-OUT SWITCH FOR A 60 CYCLE HOLTZER-CABOT SYNCHRONOUS MOTOR

136036 MODIFICATION KIT TO PROVIDE AN IMPROVED STARTING WINDING CUT-OUT SWITCH FOR A 50 OR 25 CYCLE HOLTZER-CABOT SYNCHRONOUS MOTOR



139381 LAMP AND SWITCH ASSEMBLY

1147B

SECTION 3

OLD STYLE MOTORS

Standard Replacements For Discontinued Motors					
Discontinued Motor No.	Page	Mfg. & Model No.	Description	Replacement Motor No.	Page
***74931	-	G.E. 39078 G.E. 5SH25AB1	1/40 H.P., 110V., 60 Cycle, A.C. Synchronous	82283	1-2
***78217	-	G.E. 37233	1/50 H.P., 110V., 60 Cycle, A.C. Synchronous		
***80553	-	G.E. 38367 G.E. 5SH25AB21 G.E. 5SH25AB2	1/50 H.P., 110V., 60 Cycle, A.C. Synchronous		
***82622	-	G.E. 5SH25AB7	1/40 H.P., 110V., 60 Cycle, A.C. Synchronous	122295	1-4
**83799	3-7	H.C. S-9005	1/40 H.P., 115V., 60 Cycle, A.C. Synchronous		
**104061	3-7	H.C. S-9049	1/40 H.P., 115V., 50 Cycle, A.C. Synchronous		
*6708	3-4	G.E. 28478 G.E. 5BA65AA77	1/25 H.P., 110V., 50/60 Cycle, A.C. Series	122297	1-4
***107151	-	E.S. S-9058	1/25 H.P., 110V., 50/60 Cycle, A.C. Series		
*77953	3-4	G.E. 32989 G.E. 5BA65AA29	1/25 H.P., 110V., 60 Cycle, A.C. Series		
**104038	3-6	H.C. S-9050	1/25 H.P., 115V., 50/60 Cycle A.C. Series	122299	1-4
***106875	-	E.S. S-9057	1/25 H.P., 115V., 50/60 Cycle, A.C. Series		
*70735	3-4	G.E. 31810 G.E. 5BA65AA116	1/25 H.P., 220V., 60 Cycle, A.C. Series		
*103501	3-4	G.E. 5BA65AA142	1/25 H.P., 110V., 50 Cycle, A.C. Series	129668	1-4
***116402		JOHN OSTER	115V., A.C./D.C. Series	#121335	1-6
*6707	3-5	G.E. 28479 G.E. 5BY30A6	1/20 H.P., 110V., D.C. Shunt	126766	1-5
*8280	3-5	G.E. 31382 G.E. 5BY30A7	1/20 H.P., 220V., D.C. Shunt	126768	1-5
*72586	3-5	G.E. 31531 G.E. 5BY30A3	1/17 H.P., 110V., D.C. Shunt	122293	1-5
*73644	3-5	G.E. 33373 G.E. 5BY30A10	1/17 H.P., 220V., D.C. Shunt	122301	1-5
**71610	3-5	G.E. 31661 G.E. 5BY30A9	1/17 H.P., 12V., D.C. Shunt	None	-

NOTES:

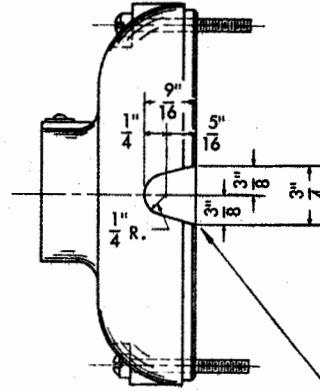
An order for a discontinued motor will be filled with the standard replacement motor as indicated above.

*No longer manufactured but similar to the replacing motor with the exception of the armature and ball bearings. See note for pages 3-4, 3-5 on page 4-2.

**Obsolete - Maintenance parts to be supplied so long as they are available.

***Obsolete - No replacement parts available.

#An order for the 116402 John Oster motor will be filled with a 121335 Modification Kit which includes the 121272 General Electric motor and the necessary mounting parts. (Specification 5644S)

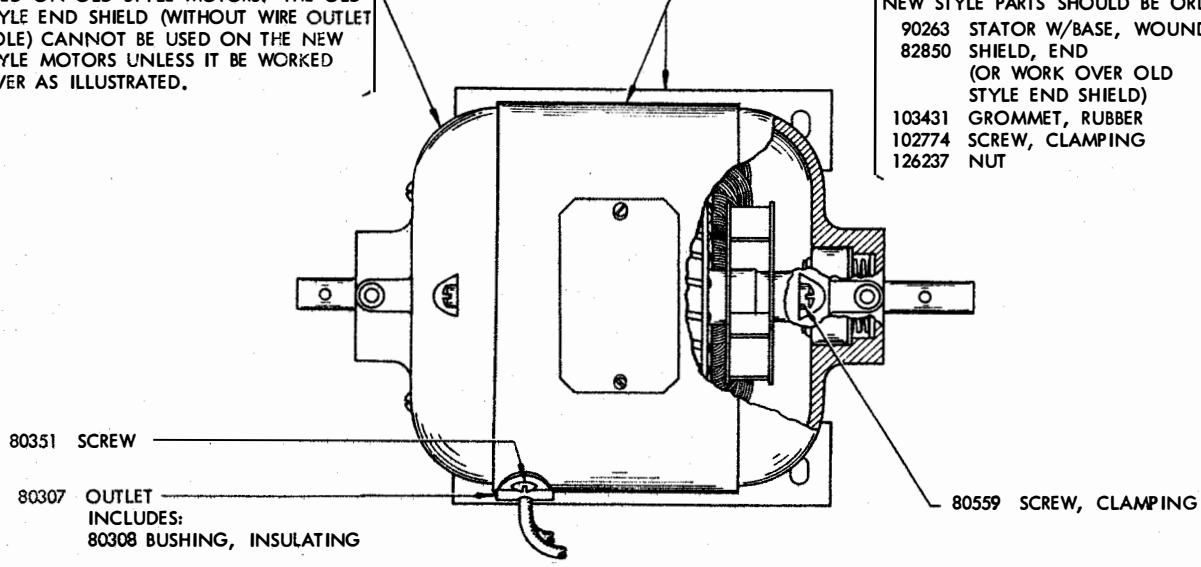


OLD STYLE 82850 END SHIELDS MAY BE WORKED OVER FOR USE WITH NEW STYLE MOTORS BY ADDING WIRE OUTLET HOLE AS ILLUSTRATED.

THE 82850 END SHIELD HAS BEEN REDESIGNED BUT RETAINS ITS ORIGINAL NUMBER. THE NEW STYLE END SHIELD (WITH WIRE OUTLET HOLE) CAN ALSO BE USED ON OLD STYLE MOTORS. THE OLD STYLE END SHIELD (WITHOUT WIRE OUTLET HOLE) CANNOT BE USED ON THE NEW STYLE MOTORS UNLESS IT BE WORKED OVER AS ILLUSTRATED.

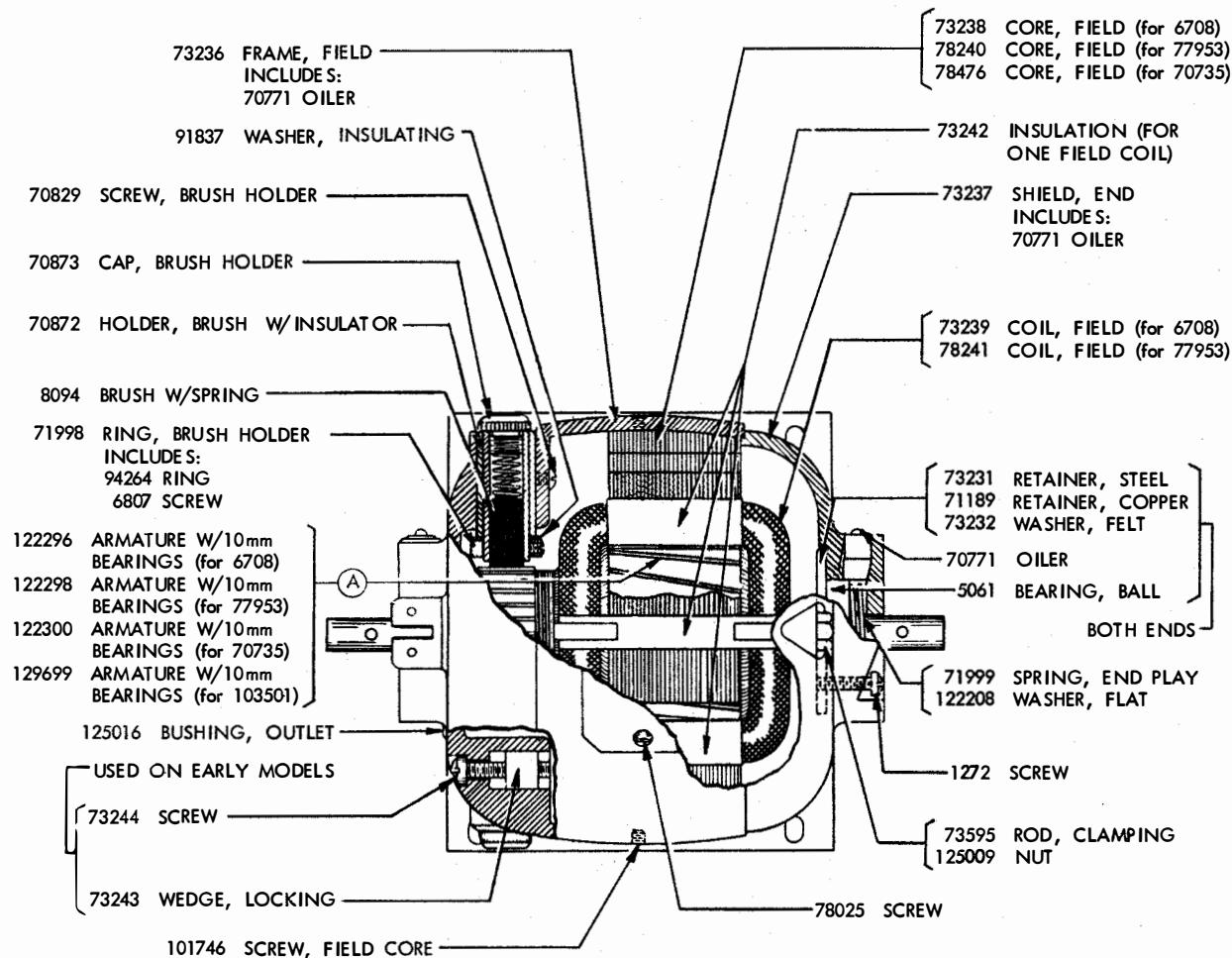
THE 90263 WOUND STATOR W/BASE HAS BEEN REDESIGNED BUT RETAINS ITS ORIGINAL NUMBER. WHEN REPLACING AN OLD STYLE STATOR (WITH TAPPED HOLES FOR THE END SHIELD CLAMPING SCREWS) WITH A NEW STYLE STATOR (WITH BODY HOLES FOR THE END SHIELD CLAMPING SCREWS) THE FOLLOWING NEW STYLE PARTS SHOULD BE ORDERED:

90263 STATOR W/BASE, WOUND
 82850 SHIELD, END
 (OR WORK OVER OLD
 STYLE END SHIELD)
 103431 GROMMET, RUBBER
 102774 SCREW, CLAMPING
 126237 NUT



82283 SYNCHRONOUS MOTOR: 1/40 H.P., 110 V., 60 CYCLE A.C. (G.E. Model 5SH25AB11)

(OLD STYLE - PARTS NOT LISTED SAME AS THOSE SHOWN ON PAGE 1-2)



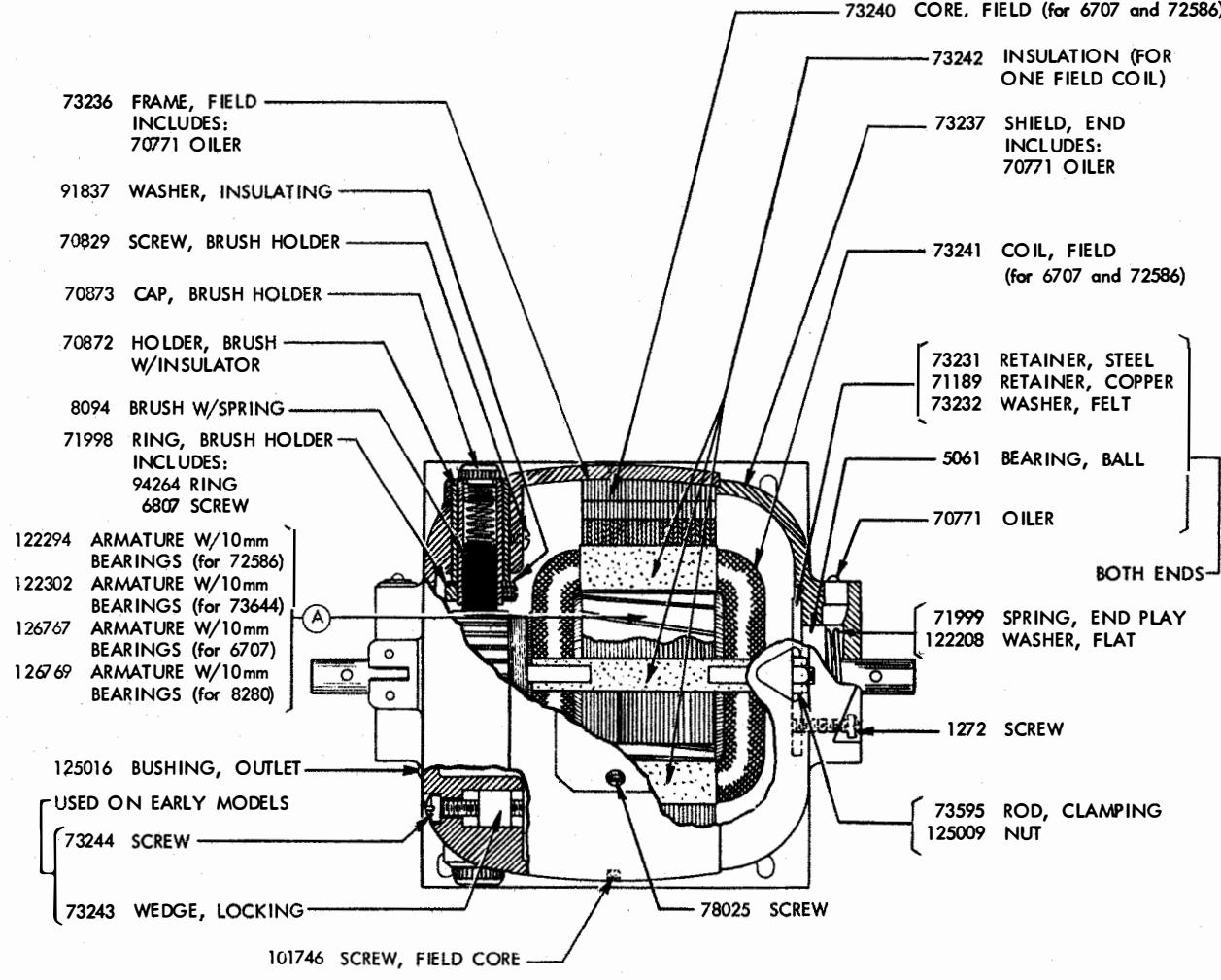
6708 SERIES MOTOR: 1/25 H.P., 110 V., 50/60 CYCLE, A.C. (G.E. Models 28478 or 5BA65AA77)

77953 SERIES MOTOR: 1/25 H.P., 110 V., 60 CYCLE, A.C. (G.E. Models 32989 or 5BA65AA29)

70735 SERIES MOTOR: 1/25 H.P., 220 V., 60 CYCLE, A.C. (G.E. Models 31810 or 5BA65AA116)

103501 SERIES MOTOR: 1/25 H.P., 110 V., 50 CYCLE, A.C. (G.E. Model 5BA65AA142)

(A) For explanation, see page 4-2.



6707 SHUNT MOTOR: 1/20 H.P., 110 V., D.C. (G.E. Model 28479 or 5BY30A6)

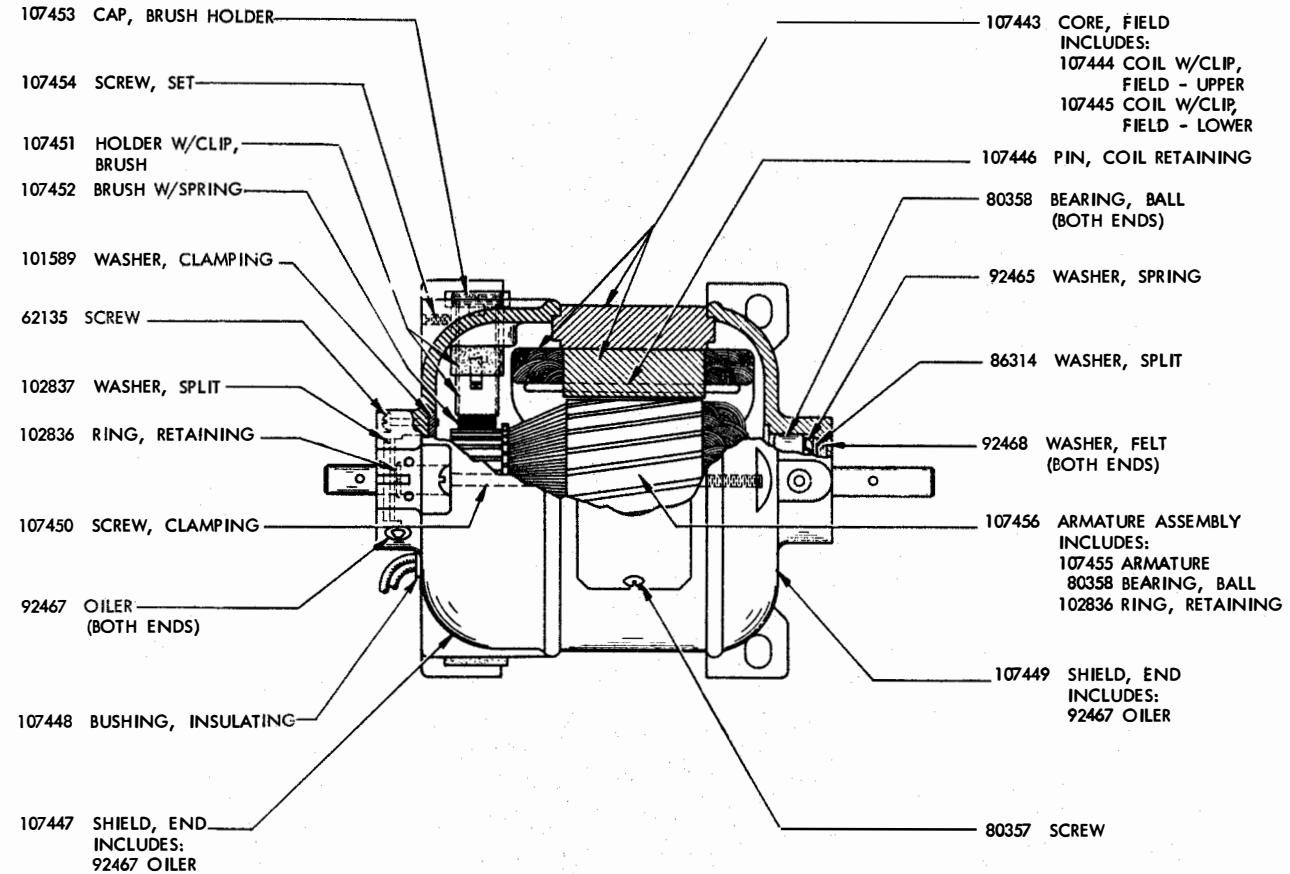
8280 SHUNT MOTOR: 1/20 H.P., 220 V., D.C. (G.E. Model 31382 or 5BY30A7)

72586 SHUNT MOTOR: 1/17 H.P., 110 V., D.C. (G.E. Model 31531 or 5BY30A3)

73644 SHUNT MOTOR: 1/17 H.P., 220 V., D.C. (G.E. Model 33373 or 5BY30A10)

71610 SHUNT MOTOR: 1/17 H.P., 12 V., D.C. (G.E. Model 31661 or 5BY30A9)

(A) For explanation, see page 4-2.



104038 SERIES MOTOR: 1/25 H.P., 115 V., 50/60 CYCLE A.C. (H.C. Model S-9050)

143240 ROTOR W/SWITCH & BEARINGS - 60 CYCLE
 143189 ROTOR W/SWITCH & BEARINGS - 50 CYCLE

Ⓐ

94561 STATOR, WOUND - 60 CYCLE
 113888 STATOR, WOUND - 50 CYCLE

136800 CUT-OUT, ROTATING - 60 CYCLE
 136804 CUT-OUT, ROTATING - 50 CYCLE

Ⓐ

105918 SPACER

136800 CUT-OUT ROTATING

Ⓐ

136802 BUSHING

T-Ⓐ

136801 CUT-OUT, STATIONARY

Ⓐ

86322 BEARING, BALL (BOTH ENDS)

86323 NUT - RIGHT HAND (THIS END)

86324 NUT - LEFT HAND (OTHER END)

86308 SCREW, CLAMPING

86320 SCREW

USED ON EARLY MODELS

86309 BUSHING, OUTLET

86848 GROMMET, RUBBER

113944 SHIELD, END INCLUDES:

70771 OILER

113945 SHIELD, END INCLUDES:

70771 OILER

104061 SYNCHRONOUS MOTOR: 1/40 H.P., 115V., 50 CYCLE A.C. (H.C. MODEL S-9049)

83799 SYNCHRONOUS MOTOR: 1/40 H.P., 115 V., 60 CYCLE A.C. (H.C. MODEL S-9005)

(WITH NEW STYLE CUT-OUT SWITCH-SEE BELOW FOR OLD STYLE)

86311 ROTOR W/CUT-OUT - 60 CYCLE
 113889 ROTOR W/CUT-OUT - 50 CYCLE
 119738 ROTOR W/CUT-OUT - 25 CYCLE

105918 SPACER

86327 INSULATOR

113947 INSULATOR

86325 CUT-OUT W/86326 SPRINGS - 60 CYCLE
 101398 CUT-OUT W/101399 SPRINGS - 25/50 CYCLE

92470 WASHER, CUPPED

86329 SCREW

90951 WASHER, LOCK

86321 RING, SPLIT includes:

55297 SCREW
 86318 ADAPTER, SPLIT RING
 86319 WASHER, FIBER
 113946 BUSHING, INSULATING

86324 NUT - LEFT HAND

86322 BEARING, BALL (BOTH ENDS)

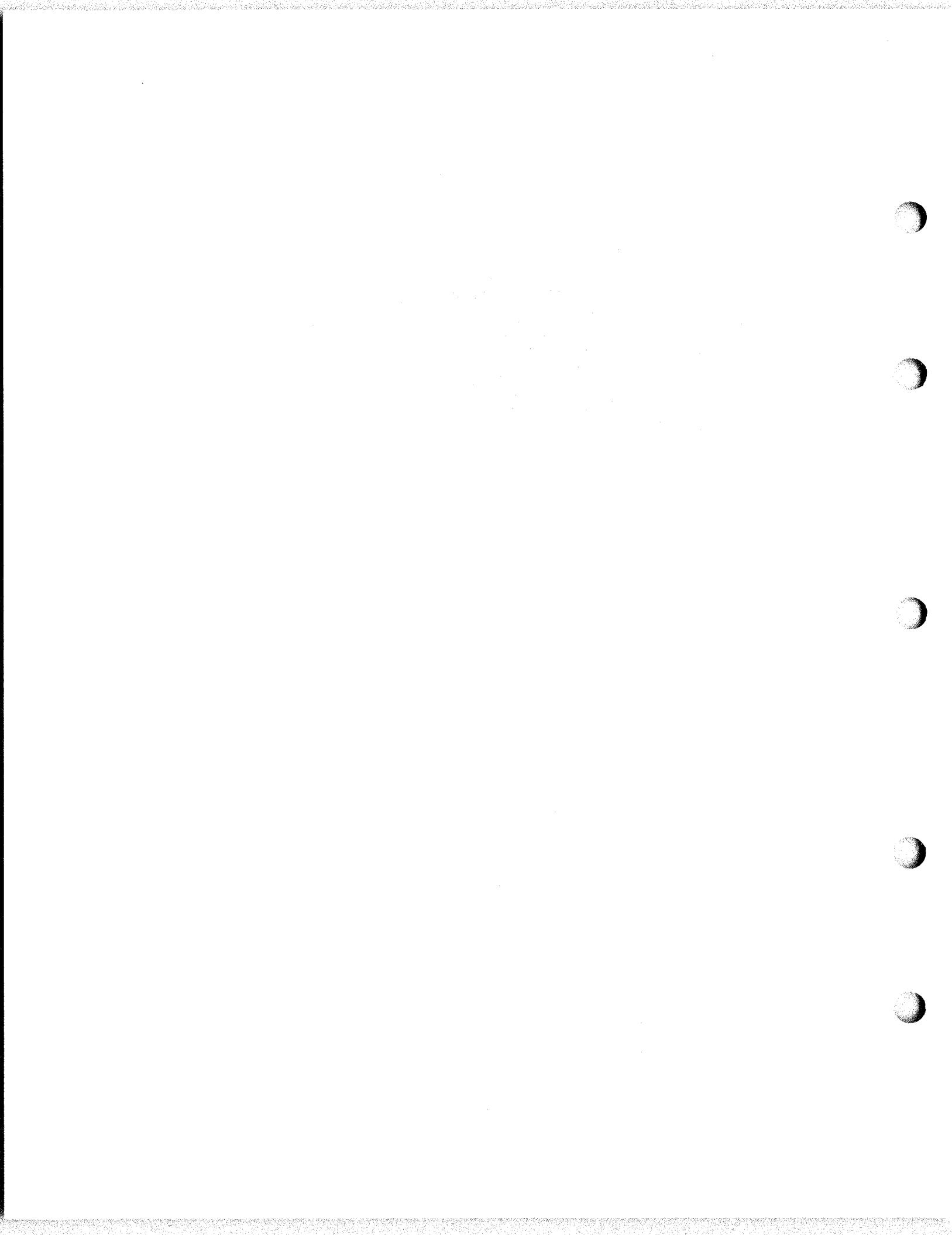
86323 NUT - RIGHT HAND

86342 ROTOR W/SWITCH & BEARINGS-60 CYCLE

119737 ROTOR W/SWITCH & BEARINGS-25 CYCLE

OLD STYLE CUT-OUT SWITCHES FOR HOLTZER-CABOT SYNCHRONOUS MOTORS

Ⓐ For explanation, see page 4-2.



SECTION 4

NOTES AND NUMERICAL INDEX

NOTES OF EXPLANATION

Page 1-4

(A) Parts marked (A) represent the new style cut-out switches for the Holtzer-Cabot synchronous motors. New and old cut-out switch assemblies are interchangeable, but their individual components are not. Old style switch components are still available for maintenance (See page 3-7).

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(A) When a new style armature with 80358 ball bearings (10 mm) is installed in an old style motor, the following parts, used with the 5061 ball bearings, are to be omitted:

- (2) 73231 Retainer, Steel
- (2) 71189 Retainer, Copper
- (2) 73232 Washer, Felt
- (8) 1272 Screw

Make certain that the outer race of the old bearing is removed from each end shield before the new armature with 10 mm bearings is inserted. Place the large diameter of the 71999 end play spring and the 122208 flat washer adjacent to the bearing.

Instructions for modifying the present armature for two 80358 bearings (10 mm) may be obtained by requesting Specification 5651S. (Bearings not furnished with Specification.)

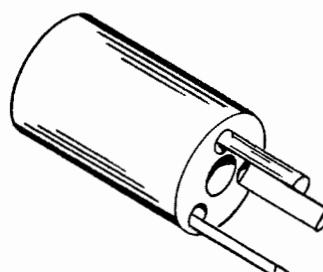
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(A) When it is desirable to replace an old style cut-out switch with springs on a Holtzer-Cabot synchronous motor, a 136035 (60 cycle) or 136036 (25 or 50 cycle) Modification Kit to Provide an Improved Starting Winding Cut-Out Switch may be ordered instead. The modification kits (also illustrated on page 2-10) consists of the following parts:

		136035	136036
(1)	136800 Cut-Out, Rotating - 60 cycle	x	
(1)	136801 Switch, Stationary	x	x
(1)	136802 Bushing, Split	x	x
(1)	136804 Cut-Out, Rotating - 25/50 cycle	x	

The old style cut-out mechanism consisted of a stationary split ring and a set of rotating brushes controlled by centrifugal force. In the new style cut-out mechanism the centrifugal action controls a set of stationary contacts. New and old style cut-out switch mechanisms are interchangeable but individual components are not.

A 136803 cut-out mounting collar (tool), illustrated below, is required for assembling the new parts in a motor and should be ordered separately. Instructions for installing the new style mechanism may be obtained by requesting Specification 5770S. (Cut-out not furnished with Specification.)



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1118	Screw (6-40 Shoulder) 2-5	70735	Motor, A.C. Series 3-4
1272	Screw (6-40 x 11/16 Fil) 3-4, 3-5, 4-2	70771	Oiler 1-3, 1-4, 1-5, 3-4, 3-5, 3-7
1297	Screw (6-40 x 7/16 Fil) 2-6, 2-7	70829	Screw (8-36 x 5/16 Rd) 1-4, 1-5, 3-4, 3-5
1303	Screw (6-40 x 13/32 Fil) 2-4	70872	Holder, Brush 1-4, 1-5, 3-4, 3-5
2191	Washer, Lock 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8	70873	Cap 1-4, 1-5, 3-4, 3-5
2407	Washer, Lock 2-10	70892	Nut (1/8-27 Hex) 2-10
2669	Washer, Lock 2-3, 2-4	70893	Fitting, Pipe 2-10
3043	Resistor 2-7	71155	Screw (6-32 x 1-1/4 Flat) 2-7
3094	Insulator 2-7	71189	Retainer 5-4, 3-5, 4-2
3438	Washer, Flat 2-3, 2-4	71610	Motor, D.C. Shunt 3-2, 3-5
3598	Nut (6-40 Hex) 2-4, 2-6, 2-7	71998	Ring 1-4, 1-5, 3-4, 3-5
3599	Nut (4-40 Hex) 2-5	71999	Spring 1-4, 1-5, 3-4, 3-5, 4-2
3640	Washer, Lock 2-3, 2-4, 2-5 2-8, 2-10	72586	Motor, D.C. Shunt 3-2, 3-5
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6305	Brush 2-6, 2-8	72326	Frame 1-4, 1-5, 3-4
6306	Holder, Brush 2-8	72327	Shield, End 1-4, 1-5, 3-4, 3-5
6314	Spring 2-3, 2-4, 2-5, 2-8	72328	Coil 1-4, 3-4
6318	Clamp 2-3, 2-4, 2-5, 2-8	72329	Coil 1-4, 3-4
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6320	Screw (6-32 x 9/32 Hex) 2-3, 2-4, 2-5, 2-8	73241	Coil 1-5, 3-5
6323	Spring 2-3, 2-4, 2-5, 2-8	73242	Insulation 1-4, 1-5, 3-4, 3-5
6324	Wheel 2-3, 2-4, 2-8	73243	Wedge 3-4, 3-5
6330	Bearing 2-3, 2-4, 2-8	73244	Screw (10-32 x 7/8 Fil) 3-4, 3-5
6340	Ring 2-8	73376	Target 2-9
6341	Bushing 2-5, 2-8	73377	Target 2-9
6342	Wire 2-8	73595	Rod 1-4, 1-5, 3-4, 3-5
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6347	Screw (6-32 x 3/8 Rd) 2-3, 2-4, 2-5, 2-8	74728	Terminal 2-2
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6349	Screw (6-32 x 1/2 Rd) 2-5	74986	Screw (6-40 x 13/32 Hex) 2-7
6707	Motor, D.C. Shunt 3-2, 3-5	77953	Motor, A.C. Series 3-2, 3-4
6708	Motor, A.C. Series 3-2, 3-4	78011	Capacitor 2-7
6770	Disk 2-8	78025	Screw (4-48 x 3/16 Rd) 1-2, 1-4, 1-5, 3-4, 3-5
6807	Screw (6-40 Set) 1-4, 1-5, 3-4, 3-5	78217	Motor, A.C. Synchronous 3-2
6885	Bracket 2-8	78240	Core 3-4
6966	Eccentric 2-5	78241	Coil 1-4, 3-4
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7002	Washer, Flat 2-2, 2-3, 2-5, 2-6, 2-7, 2-8	78400	Spring 2-2
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80358	Bearing, Ball 1-2, 1-4, 1-5, 3-6, 4-2	86812	Bracket 2-2
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